

Vinay Parakala

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EDUCATION

University of California Berkeley (May 2019)
Bachelor, Electrical Engineering and Computer Science GPA: 3.6

Berkeley, CA
August 2015 – Present

COURSEWORK

Structure and Interpretation of Programs (CS61A)
Multivariable Calculus (MATH53)
Designing Information Systems and Devices (EE16A)

Data Structures (CS61B)
Linear Algebra and Differential Equations (MATH54)
Computer Architecture (CS61C)

SKILLS

Proficient in Apache Spark, C, C++, C#, Java, MIPS Assembly, Python, Scheme, SQL, Unity, UNIX
Experienced in working with Databricks, a file system that houses large clusters of statistical data
Experienced in working as part of a team as a member of the Berkeley Virtual Reality Club
Possess strong analytical, mathematical, and problem solving skills (AIME Qualifier)

PROJECTS

Landships (Fall 2016): Worked with a project team of six on a multiplayer, co-op, tank game in virtual reality using Unity3D. I designed and created a tutorial, creating the virtual environment the player is in as well as programming the interactions the player can have with the objects around them

Image Compressor (Fall 2016): Built an image compressor using DCT (Discrete Cosine Transformation) and used Apache Spark and MapReduce to improve speed performance by more than 100x

BearMaps (Spring 2016): Built a map application using images and data from the OpenStreetMap project, creating a Google Maps like interface for the area surrounding Berkeley. Like Google Maps, my application could find the fastest route between any two points and could display any part of the region in a variety of zoom levels.

Boggle Solver (Spring 2016): Built a solver for the word game Boggle, which finds words from consecutive blocks in a grid of letters. Uses A* and a trie to store a dictionary of words in order to search through the grid and find words quickly

Yelp Maps (Fall 2015): Integrated Google maps and Yelp in a python application to create a Voronoi diagram that divided the area around the user location into sectors that were closest to certain specified restaurants based on cuisine and Yelp rating

EXPERIENCE

Bloomberg L.P.

New York, NY

Engineering Intern

Summer 2016

Worked on the language processing and machine learning team in the foundational applications department. During my time there, I worked on the table extraction service that extracts tables from financial documents. I also used libsvm, vectorizing orthographic features from tweets, to make a classifier for tweets that determined whether or not a tweet was worthy as publishing as news

Virtual Reality at Berkeley

Berkeley, CA

Project Team Member

September 2016-Present

Working as a member of a project team that uses Unity's 3D Engine to make a multiplayer virtual reality tank combat game where players take on different roles of a tank crew working as a group to combat an opposing tank crew team. I work on the back end, designing and programming the interactions players can have with their surroundings in game.

Berkeley Residential Hall Association

Berkeley, CA

Secretary

Spring 2016

Elected and served as a member on the Berkeley Residential Hall Association Council. With other elected members, I worked to generate and implement programs and ideas to improve dorm life and foster community for the residents of my dorm. Specifically as secretary, I instated an electronic public announcement board where dorm residents could find out about upcoming events from their floors.